

ESD (electrostatic dissipative); fuel compatible; standard acetal copolymer grade

Celcon® acetal copolymer grade CF802 10/9022 is a conductive, fuel compatible general purpose acetal copolymer. Celcon® CF802 10/9022 has been developed to dissipate static electricity from fuel handling systems. Celcon® CF802 10/9022 has been specially formulated for laser welding applications. Please note Celcon® CF802 10/9022 has special processing considerations to ensure static dissipation properties. Use minimum back pressure and slowest screw speed possible in retracting screw during cooling portion of cycle. Large gate size (>2 mm) recommended. Pneumatic conveying of material long distances is not recommended. Celcon® CF802 10/9022 was formerly provided under the Hostaform® tradename.

## Rheological properties

Moulding shrinkage, parallel	1.7 %	ISO 294-4, 2577
Moulding shrinkage, normal	1.6 %	ISO 294-4, 2577

## Typical mechanical properties

Tensile Modulus	3000 N	MPa	ISO 527-1/-2
Yield stress, 50mm/min	62 N	МРа	ISO 527-1/-2
Yield strain, 50mm/min	10 %	%	ISO 527-1/-2
Tensile creep modulus, 1h	2130 M	МРа	ISO 899-1
Tensile creep modulus, 1000h	1050 M	MPa	ISO 899-1
Charpy notched impact strength, 23°C	4 k	ĸJ/m²	ISO 179/1eA

### Thermal properties

Melting temperature, 10°C/min	167 °C	ISO 11357-1/-3
Temp. of deflection under load, 1.8 MPa	100 °C	ISO 75-1/-2
Coeff. of linear therm. expansion, parallel	100 E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion, normal	120 E-6/K	ISO 11359-1/-2

### Electrical properties

Volume resistivity	3 Ohm.m	IEC 62631-3-1
Surface resistivity	2000 Ohm	IEC 62631-3-2

#### Other properties

Density	14/0 kg/m³	ISO 1183
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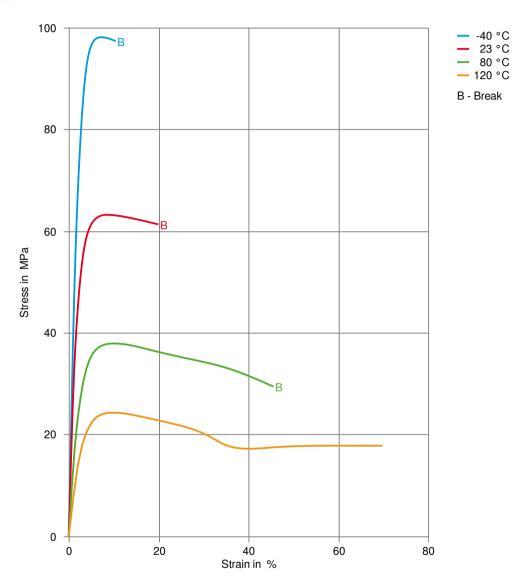
### Injection

Drying Temperature	100 - 120 °C
Drying Time, Dehumidified Dryer	3-4 h
Max. mould temperature	80 - 120 °C
Back pressure	2 MPa
Injection speed	slow

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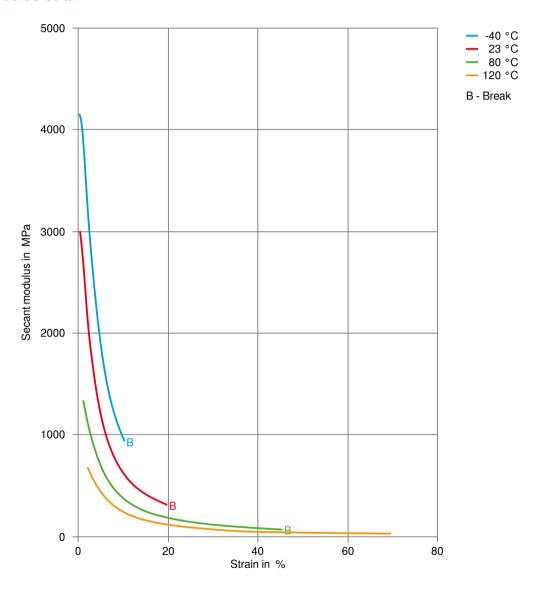
### Stress-strain



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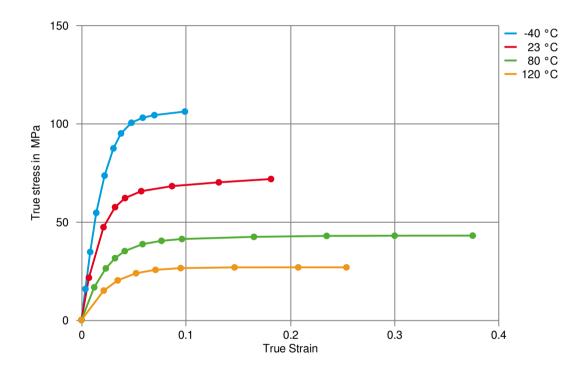
### Secant modulus-strain



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### True stress-strain



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## **Processing Texts**

Pre-drying

Drying is not normally required. If material has come in contact with moisture through improper storage or handling or through regrind use, drying may be necessary to prevent splay and odor problems.

## Other Approvals

Other Approvals

OEM	Specification
BMW	GS 93017

#### Chemical Media Resistance

#### Standard Fuels

- ✓ ISO 1817 Liquid 1 E5, 60°C
- ✓ ISO 1817 Liquid 2 M15E4, 60°C
- ✓ ISO 1817 Liquid 3 M3E7, 60°C
- ✓ ISO 1817 Liquid 4 M15, 60°C
- ✓ Standard fuel without alcohol (pref. ISO 1817 Liquid C), 23°C
- ✓ Standard fuel with alcohol (pref. ISO 1817 Liquid 4), 23°C

#### Symbols used:

✓ possibly resistant

Defined as: Supplier has sufficient indication that contact with chemical can be potentially accepted under the intended use conditions and expected service life. Criteria for assessment have to be indicated (e.g. surface aspect, volume change, property change).

not recommended - see explanation
Defined as: Not recommended for general use. However, short-term exposure under certain restricted conditions could be acceptable (e.g. fast cleaning with thorough rinsing, spills, wiping, vapor exposure).

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Revised: 2023-05-26 Source: Celanese Materials Database

NOTICE TO USERS: Values shown are based on testing of laboratory test specimens and represent data that fall within the standard range of properties for natural material. These values alone do not represent a sufficient basis for any part design and are not intended for use in establishing maximum, minimum, or ranges of values for specification purposes. Colourants or other additives may cause significant variations in data values. Properties of moulded parts can be influenced by a wide variety of factors including, but not limited to, material selection, additives, part design conditions and environmental exposure. Other than those products expressly identified as medical grade (including by MT® product designation or otherwise), Celanese's products are not intended for use in medical or dental implants. Regardless of any such product designation, any determination of the suitability of a particular material and part design for any use contemplated by the users and the manner of such use is the sole responsibility of the users, who must assure themselves that the material as subsequently processed meets the needs of their particular product or use. To the best of our knowledge, the information contained in this publication is accurate; however, we do not assume any liability whatsoever for the accuracy and completeness of such information. The information contained in this publication should not be construed as a promise or guarantee of specific properties of our products. It is the sole responsibility of the users to investigate whether any existing patents are infringed by the use of the materials mentioned in this publication, we neither suggest nor guarantee that such hazards are the only ones that exist. We recommend that persons intending to rely on any recommendation or to use any equipment, processing technique or material mentioned in this publication should satisfy themselves that they can meet all applicable safety and health standards. We strongly recommend that users seek and adhere to the manufac

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